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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,375	11/15/2001	Adrian E. Ong	M-9433 US	4697

27869 7590 06/18/2003

SKJERVEN MORRILL LLP
THREE EMBARCADERO CENTER, 28TH FLOOR
SAN FRANCISCO, CA 94111

EXAMINER

NGUYEN, TUNG X

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,375

Applicant(s)

ONG, ADRIAN E.

Examiner

Tung X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 18-27 and 29-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-17,28 and 33-38 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species of figures 4 in Paper No. 1-2 is acknowledged. The traversal is on the ground(s) that the remaining independent method claims and the claims that depend therefrom impliedly read upon the "Species of figure 4". This is not found persuasive because of *"a plurality of integrated circuit dies arranged in rows on a wafer, each integrated circuit die having probe pads along one edge, and the probe pads of integrated circuit dies on the first and second row of wafer simultaneously with a plurality of probe needles of a probe arm"* recited in claims 24-27, and 29-32 do not read on the species of figure 4; and furthermore, *"a first plurality of bond pads positioned at a first edge of the integrated circuit die, and a second plurality of bond pads positioned at a second edge of the integrated circuit die"* recited in claims 18-23 does not read on the species of the figures 4.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 18-23, 24-27, 29-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species of figure 4, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

3. The remaining claims 1-17, 28, and 33-38 are present for examining.

Specification

4. The abstract of the disclosure is objected to because the first line of the abstract "Adrian E. Ong" has to delete. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 5-17, 28, 33-38, are rejected under 35 U.S.C. 102(e) as being anticipated by Eldridge et al. (u.s.p 6,456,099).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claims 1, 5-6, 11-17, 28, 33-38, Eldridge et al. disclose in Figs. 1,10, a device comprising: functional circuitry (702) with memory circuitry and logic circuitry; a plurality of bond pads (717, 715), each bond pad (717, 715) associated with a respective portion (via 713) of the functional circuitry (702) and for bonding the

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respective portion of the functional circuitry (col. 2, lines 5-15); at least one probe pad (716) for testing of the functional circuitry (col. 1, lines 5-10); and multiplexing circuitry (708) between the probe pad (716) and the bond pads (717), the multiplexing circuitry (via 708) for multiplexing signals between the probe pad and each of the respective portions (via 713) of the functional circuitry (702), thus allowing the respective portions of functional circuitry to be tested using the probe pad and without any contact of the plurality of bond pads by a probe needle (col. 7, lines 20-27).

As to claim 2, it appears that the multiplexing circuit (708) is the selector, it would have been obvious to a person having ordinary skill in the art at the time the invention replace the multiplexing circuit by the plurality of switches.

As to claims 7-10, it appears that the probe pad would have been an obvious design choice to make the same size or larger as bond pad, and the probe pad is provided along one edge of the integrated circuit die, and the bond pads are provided at an opposing edge of the integrated circuit die (fig. 1).

7. The method is considered inherent in the structure.

Allowable Subject Matter

8. Claims 3-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:


As to claims 3-4, the prior art does not disclose the integrated circuit die comprising: a) a plurality of tri-state drivers for driving signals in the integrated circuit die, each tri-state driver coupled between a respective one of the bond pads and an associated portion of functional circuitry; b) and further comprising: a respective input/output buffer for each bond pad; in combination with the other claimed features.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X Nguyen whose telephone number is (703) 305-3337. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (703)-308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5841 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

TN
June 5, 2003